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| APPLICATION NO. | FILING D | ATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------|----------------------------|------------|------------------------|-------------------------|--------------------|--|
| 10/014,582 | 10/014,582 12/14/2001 | | David Stanley Ohn Tinn | KKL16 | 3242 | |
| 466 | 7590 0 | 07/16/2003 | | | | |
| | THOMPSON | | EXAMINER | | | |
| | 23RD STREET N, VA 22202 | 2ND FLOOR | | COTTINGHA | COTTINGHAM, JOHN R | |
| | | | | ART UNIT | PAPER NUMBER | |
| | | | | 3679 | | |
| | | | | DATE MAILED: 07/16/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Applicati n N . | Applicant(s) | | | | | |
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| | | Λ. | | | | | |
| Office Action Summany | 10/014,582 | TINN, DAVID STANLEY OHI | | | | | |
| Office Action Summary | Examin r | Art Unit | | | | | |
| The MAIL INC DATE of the control of | John R. Cottingham | 3679 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | rresp ndence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | e6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ Thi | s action is non-final. | | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-15 and 21-25</u> is/are pending in the | application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-15 and 21-25</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is objected to by the Examiner | • | | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accep | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. | | | | | | | |
| | armirer. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | | |
| 1. Certified copies of the priority documents | s have been received | | | | | | |
| 2. Certified copies of the priority documents | | on No. | | | | | |
| Copies of the certified copies of the prior application from the International But See the attached detailed Office action for a list of the certified copies of the prior application. | ity documents have been receive reau (PCT Rule 17.2(a)). | ed in this National Stage | | | | | |
| 14) Acknowledgment is made of a claim for domestic | · | | | | | | |
| a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domesti Attachment(s) | visional application has been rec | eived. | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6, 10-15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Fouts U.S. Patent 3,900,221. Fouts shows all of the claimed subject matter of a connector in Figures 1-3. A connector device comprising a body portion 34 having a bore 15 defining a housing to receive one of two members to be interconnected and a stem (horizontal protrusion) portion of substantially cylindrical form having a major axis disposed substantially perpendicular to the major axis of the bore defined in the body portion 34, the stem portion is adapted to be received, in use, in a housing defined by a bore of a second of the two members to be interconnected by the connector device, and the stem portion comprising in the outer surface thereof an annular groove 41 having the major axis thereof coincident with the major axis of the stem portion and the annular groove 41 being provided axially inwards from the distal end of the stem portion.

Regarding claim 2, the stem portion is of a hollow tubular form.

Regarding claim 3, the wall thickness of the stem portion at an axial position aligned with the annular groove 41 is substantially equal to that wall thickness of the stem portion at least at a position to one side of the groove 41.

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Regarding claim 4, the annular groove 41 is of substantially uniform depth as considered in a circumferential direction of the groove 41.

Regarding claim 5, then annular groove 41 is of substantially uniform width as considered in a circumferential direction of the groove.

Regarding claim 6, the groove 41 is of a curved shape in cross-section.

Regarding claim 10, the body portion 34 provides an abutement surface (vertical surface left of groove 41) at one end of the stem portion for contact, in use, by an end of a housing 34 of the second of the two members to be interconnected by the connector device.

Regarding claim 11, the body portion defines a through-bore to receive one of two members to be inter-connected.

Regarding claim 12, the annular groove 41 at the surface of the stem portion has a width which is at least one quarter of the axial length of the stem portion.

Regarding claim 13, the width of the annular groove 41 is at least one third of the axial length of the stem portion.

Regarding claim 14, the stem portion and body portion are integrally formed from cast or molded material.

Regarding claim 15, a connector device assembly for forming a structural interconnection between two members, the assembly comprising a connector device 34, one of two members to be inter-connected and locking means 42 selectively operable to inter-connect the connector device and the one of two members 14, the connector device comprising a body portion 34 having a bore 15 defining a housing to

receive a first of said two members to be interconnected and a stem portion of substantially cylindrical form having a major axis disposed substantially perpendicular to the major axis of the bore defined by the body portion, the stem portion is adapted to receive, in use, in a second housing 10 defined by a bores of a second of the two member to be interconnected by the connector device, the stem portion comprising in the outer surface thereof a groove 41 having the major axis thereof coincident with the major axis of the stem portion, the annular groove 41 is provided axially inwards from the distal end of the stem portion, and the locking means 42 is supported by the housing.

Regarding claim 21, the stem portion further comprises an annular abutment face (vertical wall left of groove 41), the housing defined by the bore of the second member, in use, abutting the abutment face and entirely extending over the annular groove, the annular groove 41 being apart from and intermediate the abutment face and the distal end.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fouts. Fouts does not disclose the exact ranges claimed by the Applicant, however, where the range of device sizes disclosed in the prior art envelopes the recited range.

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and there is no showing of criticality of the recited range, such recited range would have been one of ordinary skill in the art. <u>In re Reven</u>, 390 F.2d 997, 156 USPQ 679 (CCPA 1968).

Claims 22- 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fouts in view of Howell U.S. Patent 5,149,143. Fouts shows a connector device comprising: a body portion 34; and a stem portion, wherein, the body portion 34 comprises a through-bore 15 dimensioned to receive a post, the stem portion is of a tubular form and has a major axis which extends perpendicular to a major axis of the body portion, the axis of the stem portion is a major axis of a substantially cylindrical outer surface defined by the stem portion, the substantially cylindrical outer surface of the stem portion comprises a recess in the form of a circumferentially extending groove, the major axis of the groove is coincident with the major axis of the stem portion. Fouts does not show a wall of the through-bore provided with a screw threaded aperture to receive a screw for enable the post 16 to be secured. However, Howell teaches the use of a screw 104 in a wall of a through-bore to secure the members together in Figure 2. It would have been will within the level of one of ordinary skill in the art at the time the invention was made to use a screw, as taught by Howell, to further tightened the connection in Fouts.

Response to Arguments

3. Applicant's arguments with respect to claims 1-15 have been considered but are most in view of the new ground(s) of rejection.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. LaMarca et al. U.S. Patent 6,447,028 shows a similar invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (703) 306-3439. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-216.

ohn R. Cottingham

Examiner

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jrc

July 11, 2003